



## Climate change and population growth in Timor Leste: Implications for food security

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### Abstract:

The climate in Timor Leste (East Timor) is predicted to become about 1.5 degrees C warmer and about 10 % wetter on average by 2050. By the same year, the population is expected to triple from 1 to 2.5-3 million. This article maps the predicted changes in temperature and rainfall and reviews the implications of climate change and population growth on agricultural systems. Improved cultivars of maize, rice, cassava, sweet potato and peanuts with high yield performance have been introduced, but these will need to be augmented in the future with better adapted cultivars and new crops, such as food and fodder legumes and new management practices. The requirements for fertilizers to boost yields and terracing and/or contour hedgerows to prevent soil erosion of steeply sloping terrain are discussed. Contour hedges can also be used for fodder for improved animal production to provide protein to reduce malnutrition.

**Source:** <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3492559>

### Resource Description

#### Communication: ☒

resource focus on research or methods on how to communicate or frame issues on climate change; surveys of attitudes, knowledge, beliefs about climate change

A focus of content

#### Communication Audience: ☒

audience to whom the resource is directed

Public

#### Exposure : ☒

weather or climate related pathway by which climate change affects health

Food/Water Security

**Food/Water Security:** Agricultural Productivity, Livestock Productivity

#### Geographic Feature: ☒

resource focuses on specific type of geography

# Climate Change and Human Health Literature Portal

Ocean/Coastal, Valley

## **Geographic Location:**

resource focuses on specific location

Non-United States

### **Non-United States:** Asia

**Asian Region/Country:** Other Asian Country

**Other Asian Country:** Timor Leste

## **Health Co-Benefit/Co-Harm (Adaption/Mitigation):**

specification of beneficial or harmful impacts to health resulting from efforts to reduce or cope with greenhouse gases

A focus of content

## **Health Impact:**

specification of health effect or disease related to climate change exposure

Malnutrition/Undernutrition

## **Intervention:**

strategy to prepare for or reduce the impact of climate change on health

A focus of content

## **Medical Community Engagement:**

resource focus on how the medical community discusses or acts to address health impacts of climate change

A focus of content

## **Mitigation/Adaptation:**

mitigation or adaptation strategy is a focus of resource

Adaptation

## **Population of Concern:** A focus of content

## **Population of Concern:**

populations at particular risk or vulnerability to climate change impacts

Low Socioeconomic Status

## **Resource Type:**

format or standard characteristic of resource

Review

## **Timescale:**

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time period studied

Time Scale Unspecified

### **Vulnerability/Impact Assessment:**

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content